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### Claim Listing.

This listing of claims will replace all prior versions, and listings, of claims in the application (note that amendments are **highlighted in bold**):

Claim 1. (amended) A process for the preparation of a compound of the formula IA

wherein R is an alkyl group having from 1 to 6 carbon atoms, which comprises reacting a compound of the formula  ${\bf II}$ 

wherein R is described above, with an oxidation/cyclization agent is <u>selected</u> from the group consisting of:

- a) periodic acid,
- b) iodine/potassium iodate.

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- c) bromine,
- d) chlorine; and

e) a reagent that oxidizes NH<sub>2</sub> which is adjacent to the group N-R in the compound formula ii, to NZ, where Z represents, Oxygen, (H,Hal), or Hal<sub>2</sub>, and wherein Hal is chlorine, bromine or iodine, wherein said oxidation/cyclization reagent is in the presence of an iodide compound, wherein said iodide compound is quarternary ammonium iodide or inorganic iodide, in an inert organic solvent, under an inert atmosphere and at a temperature, wherein said iodide is soluble in said inert organic solvent, with the proviso that when said oxidation/cyclization agent is not an iodide, the iodide compound itself is the oxidation/cyclization agent.

Claim 2. (original) The process of claim 1 wherein R is an alkyl group having 1 to 4 carbon atoms.

Claims 3 to 4 (cancelled)

Claim 5. (amended) The process of claim 4  $\underline{1}$  wherein said lodide is selected from the group consisting of Bu<sub>4</sub>NI and KI.

Claim 6. (amended) The process of claim 4 1 wherein said inert organic solvent is selected from the group consisting of:

- a) an amide;
- b) an acyclic ether;
- c) a cyclic ether;
- d) an alkyl alkanoate wherein the alkyl group has 1 to 4 carbon atoms and the alkanoate group has 2 to 4 carbon atoms;
  - e) a halogenated hydrocarbon;
  - f) toluene; and
  - (g) mixtures thereof.

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Claim 7. (previously presented) The process of claim 6 wherein the organic solvent is selected from the group consisting of:

- a) DMF;
- b) t-butyl-methyl ether;
- c) THF;
- d) acetonitrile;
- e) methylene chloride; and
- f) mixtures of the above solvents.

Claim 8. (original) The process of claim 7 wherein the reaction takes place at a temperature of about (-)20°C to about (+) 70°C and under a nitrogen atmosphere.

Claim 9. (previously presented) The process of claim 6 wherein:

- a) the organic solvent is a 50/50 mixture of THF/CH₃CN;
- b) the oxidation/cyclization agent is H<sub>5</sub>IO<sub>6</sub>;
- c) the iodide is Bu<sub>4</sub>NI and
- d) the reaction takes place at a temperature of about 0°C to about (+)60°C.

Claim 10. (previously presented) A process for preparing a compound of the formula III:

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III

which comprises reacting a compound of the formula 4:

with a compound of the formula X-CO-Y in the presence of an acid binding agent, wherein each of X and Y is the same or different leaving group, with the proviso that X is not 4-nitrophenyloxy group, to yield a compound of the formula III, wherein X of said compound X-CO-Y is selected from the group consisting of

- a) phenyloxy;
- b) 2-naphthyloxy and
- c) substituted phenyloxy, and wherein Y of said compound X-CO-Y is selected from:
  - a) chlorine,
  - b) bromine, or
  - c) lodine;

and wherein the substituents on said substituted phenyloxy group are selected from the group consisting of:

- a) 2-nitro;
- b) pentafluoro;
- c) chlorine;
- d) bromine;
- e) iodine, and
- f) combinations of the above.

Claim 11. (canceled)

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#### Claim 12. (canceled)

Claim 13. (original) The process of claim 10 wherein said reaction of the compound of the formula 4 with a compound of the formula X-CO-Y is performed in the presence of an acid binding agent, in an inert organic solvent, under an inert atmosphere and at a temperature of about (-) 20°C to about (+) 50°C.

Claim 14. (original) The process of claim 13 wherein said acid binding agent is a tertiary amine.

Claim 15. (previously presented) The process of claim 13 wherein the organic solvent is selected from the group consisting of

- a) an amide;
- b) an acyclic ether;
- c) a cyclic ether;
- d) an alkyl alkanoate wherein the alkyl group has 1 to 4 carbon atoms and the alkanoate group has 2 to 4 carbon atoms;
  - e) a halogenated hydrocarbon, and
  - f) mixtures thereof.

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Claim 16. (previously presented) A process for the preparation of a compound of the formula  $\Pi$ :

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wherein R is an alkyl group having from 1 to 6 carbon atoms, comprising, reacting a compound of the formula  $\mathbf{H}$ :

wherein X is a leaving group with an alkylhydrazine having from 1 to 6 carbon atoms.

Claim 17. (original) The process of claim 16 wherein said alkylhydrazine is R-NH-NH<sub>2</sub>, wherein R is an alkyl group having 1 to 4 carbon atoms.

Claim 18. (original) The process of claim 16 wherein the reaction takes place in an inert organic solvent selected from the group consisting of:

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- a) a non-nucleophilic amine and
- b) an ether; and
- c) mixtures thereof.

Claim 19. (original) The process of claim 16 wherein X is selected from the group consisting of:

- a) phenyloxy;
- b) 2-naphthyloxy and
- c) substituted phenyloxy, wherein the substituents are electron withdrawing.

Claim 20. (original) The process of claim 19 wherein said substituents are selected from the group consisting of:

- a) 2-nitro;
- b) 4-nitro;
- c) pentafluoro;
- d) chlorine and
- e) bromine.

Claim 21. (previously presented) The process of claim 17 wherein said compound of formula II is a 1-alkyl derivative of 5-amino-4-(aminocarbonyl)-1H-imidazole-1-carboxylic acid hydrazide wherein the alkyl group contains 1 to 6 carbon atoms.

Claim 22. (previously presented) The process of claim 21 wherein said compound of formula II is 5-amino-4-(aminocarbonyl)-1H-imidazole-1-carboxylic acid 1-methylhydrazide.

Claim 23. (original) The process of claim 14 wherein compound 4:

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is reacted with 4-nitrophenyl chloroformate, in the presence of triethyl amine, said reaction taking place in methylene chloride solvent, under a nitrogen atmosphere and at a temperature of about (-)20°C to about (+) 50°C to yield compound (3):

(3)

(1):

Claim 24. (previously presented) A process for preparing temozolomide

comprising:

a) reacting compound 4:

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$$\begin{array}{c|c}
O & & \\
H_2N & & \\
H_2N & & \\
\end{array}$$

$$(4)$$

with 4-nitrophenyl chloroformate in the presence of triethylamine in CH₂Cl₂, under a nitrogen atmosphere at about 25°C to obtain compound (3):

b) reacting compound (3) with methylhydrazine in DMF at about 0°C to obtain compound (2):

$$\begin{array}{c} O \\ CH_3 \\ NH_2 \\ NH_2 \\ \end{array}$$
 H<sub>2</sub>NCO (2) , and

c) reacting compound (2) with  $Bu_4NI$  in a 50/50 mixture of THF/CH<sub>3</sub>CN, at a temperature of about (+)  $60^{\circ}$ C for a time of about 0 to about 60 minutes, followed by the cooling of the reaction mixture to about (+)  $25^{\circ}$ C and the addition of  $H_5IO_6$  and stirring for about 10 to about 60 minutes to obtain temozolomide (1).

Claims 25-28. (cancelled)

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Claim 29. (New) A process for the preparation of a compound of the formula IA

wherein R is an alkyl group having from 1 to 6 carbon atoms, which comprises reacting a compound of the formula  ${f II}$ 

$$H_2N$$
 $H_2N$ 
 $N$ 
 $H_2N$ 
 $N$ 
 $H_2N$ 
 $N$ 
 $H_2N$ 
 $N$ 
 $H_2N$ 
 $N$ 

wherein R is described above, with an oxidation/cyclization agent, where said oxidation/cyclization agent is H<sub>5</sub>IO<sub>6</sub>, in the presence of an iodide compound, where said iodide compound is Bu<sub>4</sub>NI, in an inert organic solvent, under an Inert atmosphere and at a temperature, wherein said iodide is soluble in said inert organic solvent, with the proviso that when said oxidation/cyclization agent is not an lodide, the iodide compound itself is the oxidation/cyclization agent.

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